

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board

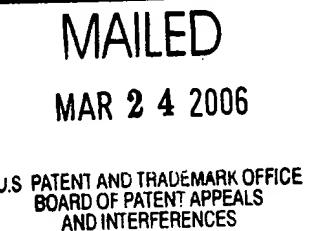
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID ALLEN ROBERTS,
JOHN ANTHONY MARSELLA and
ROBERT EDWARD STEVENS

Appeal No. 2006-0869
Application 09/847,883

ON BRIEF



Before GARRIS, WALTZ, and KRATZ, *Administrative Patent Judges*.

WALTZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the primary examiner's final rejection of claims 4 through 11, 13 through 20, 22 and 23.¹ Claims 24 and 25 are the only remaining claims pending in

¹The examiner has inadvertently omitted claim 16 from the statement of any rejection (see the final Office action dated Feb. 24, 2005; Answer, page 3). Appellants also fail to discuss claim 16 (Brief, page 3; Reply Brief in its entirety). The examiner does discuss the rejection of claim 16 in the body of the rejection (Answer, page 3). We consider claim 16 as included in the first rejection on page 3 of the Answer since claim 16 depends on rejected claim 11. We deem the examiner's error harmless, especially in view of our disposition of the appealed rejections *infra*.

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this application and stand withdrawn from consideration by the examiner as directed to a non-elected invention (Brief, page 2). We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellants, the invention is directed to a prewetted cleaning wipe for use in cleaning surfaces in an electronics clean room having low volatile organic chemical content (VOC) and low nonvolatile residue (NVR) property where the wipe is comprised of a substrate wetted with an aqueous cleaning solution consisting essentially of water and from 0.001 to 0.5% of an acetylenic diol (Brief, page 2). Claims 20 and 23 are illustrative of the invention and are reproduced below:

20. A prewetted cleaning wipe for cleaning surfaces in an electronic materials fabricating area having a low volatile organic chemical content in the range of 0.001% to 0.5% by weight and low nonvolatile residue property of at least 1×10^{-4} torr at 25°C comprising; a woven fibrous polyester/cellulose wipe substrate wetted with an aqueous solution consisting essentially of high purity water selected from the group consisting of distilled water and deionized water, and from 0.001% to 0.5% by weight of an acetylenic diol surface active agent selected from the group consisting of dimethyl octynediol, tetramethyl decynediol and mixtures thereof.

23. In a cleaning wipe for use in cleaning an electronics fabrication industry clean room comprising a wipe substrate wetted with a cleaning solution, the improvement which resides in a cleaning wipe having low volatile organic chemical and low nonvolatile residue properties comprising a wipe substrate wetted with a solution consisting essentially of water and from 0.001% to 0.5% by weight of an acetylenic diol.

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The examiner has relied upon the following references as evidence of obviousness:

Watts et al. (Watts) 0 389 612 B1 Oct. 03, 1990
(published European Patent Application)

Wilkinson et al. (Wilkinson) 0 830 890 A1 Mar. 25, 1998
(published European Patent Application)

Morin et al. (Morin) 6,189,189 Feb. 20, 2001

Claims 4-11, 13-19 and 23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Morin in view of Wilkinson (Answer, page 3). Claims 20 and 22 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Morin in view of Wilkinson and Watts (Answer, page 6). We reverse both grounds of rejection on appeal essentially for the reasons stated in the Brief, Reply Brief and those reasons set forth below.

OPINION

The examiner finds that Morin discloses a method of manufacturing low contaminant wipes useful as clean room wipes where a polyester fiber substrate is presaturated with a desired solvent, in particular solutions of alcohols and water (Answer, page 3). The examiner recognizes that Morin fails to teach that the particular alcohol solution can be an acetylenic diol as required by the claims on appeal (Answer, page 4). The examiner finds that Wilkinson discloses surfactants for use in

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liquid/supercritical carbon dioxide applications, such as electronic cleaning operations, where the surfactant composition comprises carbon dioxide/water mixtures with acetylenic diols (*id.*). From these findings, the examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of appellants' invention "to use the acetylenic diols of Wilkinson as the alcohol in Morin motivated by the desire to choose an alcohol suitable for applications such as electronic cleaning operations" (*id.*). We disagree.

The initial burden of establishing a *prima facie* case of obviousness rests with the examiner. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). It is incumbent upon the examiner, when combining references to establish *prima facie* obviousness, to establish some reason, suggestion or motivation to combine the references as proposed. See *In re Dembiczaik*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). As correctly found by the examiner, Morin discloses prewetted cleaning wipes saturated with a "desired solvent," where suitable solvents include "solutions of alcohols ... especially isopropanol and water" (col. 7, ll. 18-26). On this record, the examiner has not established that the "alcohols" taught by Morin would have been considered generic to acetylenic

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diols as required by the claims on appeal (Answer, page 10). On this record, Wilkinson teaches acetylenic diols as a separate class of surfactants from acetylenic alcohols in his system (abstract; page 3, ll. 44 et seq.). Wilkinson is directed to compounds which exhibit surface active properties and are soluble in liquid/supercritical carbon dioxide, namely compounds which act as surfactants by lowering the surface tension between carbon dioxide and carbon dioxide-phobic substances (abstract; page 3, ll. 44-46; and Example 4 on page 7). Wilkinson specifically teaches that surfactant technology is well developed for aqueous based systems but is not well understood for carbon dioxide applications, and thus aqueous surfactants are generally not suitable, having limited or no utility, for carbon dioxide based systems (page 2, ll. 9-15, 25-27, 41-42, and 55-58). As correctly argued by appellants (Brief, pages 8-9), the behavior of acetylenic diols under supercritical conditions in a carbon dioxide based system, in a like manner to the teachings of Wilkinson discussed above, would have provided no reasonable teaching, suggestion or motivation to use these acetylenic diols as the surfactant or solvent in place of the alcohol in the aqueous based system of Morin. Accordingly, we disagree with the examiner's argument that "the environment in which the cleaning

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takes place is irrelevant since Wilkinson does demonstrate that surfactants such as acetylenic diols are useful in clean room type applications" (Answer, page 10). We determine that Wilkinson only teaches that acetylenic diols exhibit surfactant properties in carbon dioxide based systems, which may be used in clean room type applications (abstract; page 2, l. 5, ll. 56-58; page 3, ll. 44-46; page 4, ll. 15-16; and page 5, ll. 12-20).

For the foregoing reasons and those stated in the Brief and Reply Brief, we determine that the examiner has not established on this record any reason, suggestion or motivation for substituting the acetylenic diols of Wilkinson for the alcohol solvents in the aqueous system of Morin. Therefore we determine that the examiner has failed to establish a prima facie case of obviousness in view of the reference evidence. Accordingly, the rejection under section 103(a) over Morin in view of Wilkinson is reversed.

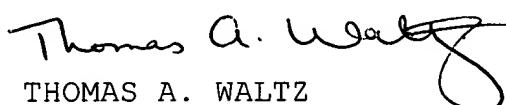
With regard to the rejection of claims 20 and 22, the examiner further applies Watts for the teaching of employing polyester and cotton as the fiber for the substrate of the wipe (Answer, page 7). Therefore it is clear that Watts does not

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remedy the deficiencies discussed above in the rejection over Morin and Wilkinson. Accordingly, this rejection also must be reversed.

The decision of the examiner is reversed.

REVERSED


BRADLEY R. GARRIS)
Administrative Patent Judge)
)

THOMAS A. WALTZ)
Administrative Patent Judge) BOARD OF PATENT
)

PETER F. KRATZ) APPEALS AND
Administrative Patent Judge) INTERFERENCES
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TAW/TF

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